



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In re application of:

Pascal, et al.

Serial. No. 10/087,167

Filed: October 24, 2001

For: Control of Gene Expression in Plants

Art Unit: 1638

Examiner: TBA

Atty Docket: 50018A

Confirmation No.: 4256

48

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

This Information Disclosure Statement is filed in accordance with 37 C.F.R. §§ 1.56, 1.97, and 1.98. The items listed on the enclosed Form PTO-1449 may be deemed to be pertinent to the above-identified application and are made of record to assist the Patent and Trademark Office in its examination of this application. Copies of the listed items are enclosed herewith. The Examiner is respectfully requested to fully consider the items in relation to this application and to indicate that each reference was considered by returning a copy of the initialed PTO 1449 forms.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicants reserve the right to dispute any of the listed documents as prior art during examination. Further, Applicants do not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the

claims of the present application. Further, the submission of the Information Disclosure Statement is not to be construed as a representation that a search has been made or that no other material information may exist.

In accordance with 37 CFR §1.97(b)(3), no fee is believed to be required for consideration of this Statement since it is being submitted before the mailing date of a first Office Action on the merits. If a fee is deemed to be required, the Commissioner is hereby authorized to charge such fee to Deposit Account No. 50-1744.

Respectfully submitted,



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Attorney for Applicants  
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## INFORMATION DISCLOSURE CITATION

(Several sheets if necessary)

ATTY. DOCKET NO.  
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## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILIN DATE
	AA	4,833,080	5/23/89	Br�nt et al.	435	172.3	
	AB	4,981,784	1/1/91	Evans et al.	435	6	
	AC	5,171,671	12/15/92	Evans et al.	435	69.1	
	AD	5,262,300	11/16/93	Evans, et al.	435	6	
	AE	5,534,418	7/9/96	Evans et al.	435	69.1	
	AF	5,614,395	3/25/97	Ryals et al.	435	172.3	
	AG	5,641,652	6/24/97	Oro et al.	435	69.1	
	AH	5,688,691	11/18/97	Oro et al.	455	348	
	AI	5,707,800	1/13/98	Mangelsdorf et al.	435	6	
	AJ	5,710,004	1/20/98	Evans et al.	435	6	
	AK	5,874,534	2/23/99	Vegeto et al.	530	350	
	AL	5,880,333	3/9/99	Goff et al.	800	288	

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	OFFICE	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	AM	EP 0 332 104	6/3/89	EP			<input type="checkbox"/>	<input type="checkbox"/>
	AN	WO 90 11273	10/4/90	WIPO			<input type="checkbox"/>	<input type="checkbox"/>
	AO	WO 91 12258	1/20/94	WIPO			<input type="checkbox"/>	<input type="checkbox"/>
	AP	WO 91 13167	9/5/91	WIPO			<input type="checkbox"/>	<input type="checkbox"/>
	AQ	WO 91 14695 A	10/3/91	WIPO			<input type="checkbox"/>	<input type="checkbox"/>
	AR	WO 93 03162	2/18/93	WIPO			<input type="checkbox"/>	<input type="checkbox"/>
	AS	WO 93 06215	4/1/93	WIPO			<input type="checkbox"/>	<input type="checkbox"/>
	AT	WO 93 21334 A	10/28/93	WIPO			<input type="checkbox"/>	<input type="checkbox"/>
	AU	WO 93 23431	11/25/93	WIPO			<input type="checkbox"/>	<input type="checkbox"/>
	AV	WO 94 01558 A	1/20/94	WIPO			<input type="checkbox"/>	<input type="checkbox"/>
	AW	WO 96 27673 A	9/12/96	WIPO			<input type="checkbox"/>	<input type="checkbox"/>
	AX	WO 96 37609	11/28/96	WIPO			<input type="checkbox"/>	<input type="checkbox"/>
	AY	WO 97 38117	10/16/97	WIPO			<input type="checkbox"/>	<input type="checkbox"/>

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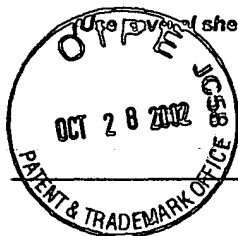
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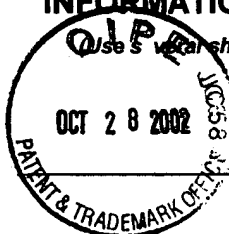


OTHER DOCUMENTS (Including Author, Title, Date, Pertinent pages, Etc.)

BA	Beato, M., <i>Gene Regulation by Steroid, Cell</i> , Vol. 56 (February 10, 1989) pp. 335-344
BB	Brent, R. and Ptashne, M., <i>A Eukaryotic Transcriptional Activator Bearing the DNA Specificity of a Prokaryotic Repressor Cell</i> , Vol. 43 (1985) pp. 729-736
BC	Christianson, A. and Kafatos, F., <i>Binding Affinity of the Drosophila melanogaster CF1/USP Protein to the Chorion s15 Promoter Biochemical and Biophysical Research Communications</i> , Vol. 193, No. 3 (June 30, 1993) pp. 1318-1323
BD	Christopherson, et al., <i>Ecdysteroid-dependent regulation of genes in mammalian cells by a Drosophila ecdysone receptor and chimeric transactivators, Proceedings of the National Academy of Sciences</i> , Vol. 89 (1992) pp. 6314-6318.
BE	Desjarlais, J. R. and Berg, J. M., <i>Use of a zinc-finger consensus sequence framework and specificity rules to design specific DNA binding proteins Proceedings of the National Academy of Science, USA</i> , Vol. 90 (March 1993), pp. 2256-2260
BF	Dhadialla et al., <i>New Insecticides with Ecdysteroidal and Juvenile Hormone Activity Annual Review of Entomology</i> , Vol. 43 (1998) pp. 545-569
BG	Evans, R., <i>The Steroid and Thyroid Hormone Receptor Superfamily Science</i> , Vol. 240 (May 13, 1988) pp. 889-895
BH	Fujiwara et al., <i>Cloning of an Ecdysone Receptor Homolog from Manduca Sexta and the Development Profile of Its mRNA in Wings Insect Biochemistry and Molecular Biology</i> , Vol. 25, No. 7 (1995) pp. 845-856
BI	Gaffney et al., <i>Requirement of Salicylic Acid for the Induction of Systemic Acquired Resistance Science</i> , Vol. 261 (August 6, 1993) pp. 754-756
BJ	Goff, et al., <i>Identification of functional domains in the maize transcriptional activator C1: comparison of wild-type and dominant inhibitor proteins Genes &amp; Development</i> , Vol. 5 (1991) 298-309
BK	Harmon et al., <i>Activation of mammalian retinoid X receptors by the insect growth regulator methoprene Proceedings of the National Academy of Sciences</i> , Vol. 92 (June 1995) p. 6157-6160
BL	Henrich, et al., <i>A steroid/thyroid hormone receptor superfamily member in Drosophila melanogaster that shares extensive sequence similarity with a mammalian homologue Nucleic Acids Research</i> , Vol. 18, No. 14 (1990) pp. 4143-4148
BM	Jones, G. and Sharp, Phillip, <i>Ultraspiracle: An invertebrate nuclear receptor for juvenile hormones Proceedings of the National Academy of Sciences</i> , Vol. 94 (December 1997), pp. 13499-13503

EXAMINER	DATE CONSIDERED
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NO. 4256Group  
1638

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BN	Koelle, et al., <i>The Drosophila EcR Gene Encodes an Ecdysone Receptor, a New Member of the Steroid Receptor Superfamily</i> <i>Cell</i> , Vol. 67 (1991) pp. 59-77.
BO	Kothapalli, et al., Cloning and developmental expression of the ecdysone receptor gene from the spruce budworm, <i>Choristoneura fumiferana</i> <i>Developmental Genetics</i> , Vol. 17 (1995) pp. 319-330.
BP	Liu, et al., <i>Design of polydactyl zinc-finger proteins for unique addressing within complex genomes</i> <i>Proceedings of the National Academy of Science, USA</i> , Vol. 94 (May 1997) pp. 5525-5530
BQ	Lloyd et al., <i>Epidermal Cell Fate Determination in Arabidopsis: Patterns Defined by a Steroid-Inducible Regulator</i> <i>Science</i> , Vol. 266 (October 21, 1994) pp. 436-439
BR	Martinez et al., <i>A chemically inducible gene expression system for plants based on the ecdysteroid receptor from Heliothis virescens</i> <i>Plant Physiology</i> , (Supp.) Vol. 114, No. 3 (July 1997), pp. 258
BS	Meijer, et al. <i>HD-Zip proteins of families I and II from rice: interactions and functional properties</i> <i>Molecular and General Genetics</i> , Vol. 263 (2000) pp. 12-21
BT	Meshi, T. and Iwabuchi M., <i>Plant Transcription Factors</i> <i>Plant Cell Physiology</i> , Vol. 36(8) (1995) pp. 1405-1420
BU	Ng, H. and Bird, A., <i>Histone deacetylases: silencers for hire</i> <i>Trends in Biochemical Sciences</i> , Vol. 25 (March 2000) pp. 121-126
BV	Oro, et al., <i>Relationship between the product of the Drosophila ultraspiracle locus and the vertebrate retinoid X receptor</i> <i>Nature</i> , Vol. 347 (September 20, 1990), pp. 298-301
BW	Oro, et al., <i>The Drosophila nuclear receptors: new insight into the actions of nuclear receptors in development</i> <i>Current Opinion in Genetics and Development</i> , Vol. 2 (1992), pp. 269-274
BX	Palli, et al., <i>A nuclear juvenile hormone-binding protein from larvae of Manduca sexta: A putative receptor for the metamorphic action of juvenile hormone</i> <i>Proceedings of the National Academy of Sciences</i> , Vol. 91 (June 1994), pp. 6191-6195
BY	Parker et al., <i>Structure and function of nuclear hormone receptors</i> <i>Seminars in Cancer Biology</i> , Vol. 1 (1990) p. 81-87

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## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent pages, Etc.)

BZ	Picard et al., A Movable and Regulable Inactivation Function within the Steroid Binding Domain of the Glucocorticoid Receptor <i>Cell</i> , Vol. 54 (September 23, 1988) pp. 1073-1080
CA	Ptashne M., <i>How eukaryotic transcriptional activators work</i> <i>Nature</i> , Vol. 335 (1988) pp. 683-689.
CB	Riddiford, L., <i>Hormone Receptors and the Regulation of Insect Metamorphosis</i> <i>Receptor</i> , Vol. 3 (1993) pp. 203-209
CC	Sadowski, et al., <i>GAL4-VP16 is an unusually potent transcriptional activator</i> <i>Nature</i> , Vol. 335 (1988) 563-564
CD	Saleh, D., et al., <i>Cloning and characterization of an ecdysone receptor cDNA from <i>Locusta migratoria</i></i> <i>Molecular And Cellular. Endocrinology</i> , Vol. 143 (1998) pp. 91-99
CE	Schena, M., et al. <i>A steroid-inducible gene expression system for plant cells</i> <i>Proceedings of the National Academy of Sciences</i> , Vol. 88 (December 1991) pp. 10421-10425
CF	Segraves, A., <i>Something Old, Some Things New: The Steroid Receptor Superfamily in <i>Drosophila</i></i> <i>Cell</i> , Vol. 67 (October 18, 1991) pp. 225-228
CG	Sutherland, et al., <i>Drosophila hormone receptor 38: A second partner for <i>Drosophila</i> USP suggests an unexpected role for nuclear receptors of the nerve growth factor-induced protein B type</i> <i>Proceedings of the National Academy of Sciences</i> , Vol. 92 (August 1995) pp. 7966-7970
CH	Swevers et al., <i>The Silkmoth Homolog of the <i>Drosophila</i> Ecdysone Receptor (B1 Isoform): Cloning and Analysis of Expression During Follicular Cell Differentiation</i> <i>Insect Biochemistry and Molecular Biology</i> , Vol. 25, No. 7 (1995) pp. 857-866
CI	Thomas, et al., <i>Heterodimerization of the <i>Drosophila</i> ecdysone receptor with retinoid X receptor and ultraspiracle</i> <i>Nature</i> , Vol. 362 (April 1993) pp. 471-475
CJ	Triezenberg, et al., <i>Functional dissection of VP16, the transactivator of herpes simplex virus immediate early gene expression</i> <i>Genes &amp; Development</i> , Vol. 2 (1988) pp. 718-729
CK	Wing K.D., <i>RH 5849, a Nonsteroidal Ecdysone Agonist: Effects on a <i>Drosophila</i> Cell Line</i> <i>Science</i> , 241 (1988) 467-469.
CL	Wu, et al., <i>Functional analysis of HD2 histone deacetylase homologues in <i>Arabidopsis thaliana</i></i> <i>The Plant Journal</i> , Vol. 22(1) (2000) pp. 19-27

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# TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	10/087,167
Filing Dat	10/24/2001
First Named Inventor	PASCAL
Group Art Unit	1638
Examiner Name	TBA
Attorney Docket Number	50018A

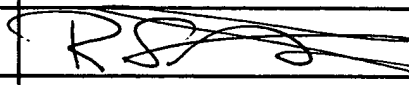
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## ENCLOSURES (check all that apply)

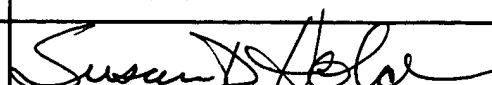
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Remarks

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Randee S. Schwartz, Attorney for Applicants, Registration No. 45,085
Signature	
Date	10-25-02

## CERTIFICATE OF MAILING

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